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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/772,382	HUANG ET AL.	
	Examiner	Art Unit	
	Jonathan G. Sterrett	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 October 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,9,11-15 and 18-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,9,11-15 and 18-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 21, 2006 has been entered

2. This **Non-Final Office Action** is responsive to applicant's amendment filed October 21, 2006. Applicant's amendment of October 21, 2006 amended **Claims 1, 14, 20, 22 and 26**. Currently **Claims 1-7, 9, 11-15 and 18-32** are pending.

Response to Arguments

3. Applicant's arguments filed on October 21, 2006 have been fully considered but they are not persuasive.

4. The applicant argues on page 12 that Bayer does not teach the claimed limitation of tabulating in memory cached votes accumulated over a predefined time interval to generate intermediate voting results and writing the results and each raw vote accumulated over the interval to a database. In support of this argument, the applicant alleges that Oracle 8i fails to teach this missing limitation and that there is no motivation to combine the references.

The examiner respectfully disagrees.

In response to these arguments, the examiner would point out that the test for obviousness is not whether every claim limitation is taught, nor whether the features of the second reference may be bodily incorporated into the second reference. Rather, the test for obvious is what the combined references would have suggested to one of ordinary skill in the art.

The rejection is made over a combination of Bayer and Oracle 8i. Bayer teaches that there are raw, i.e. individual votes. These individual votes contain information that indicates a selection or indication of a preference. The tallying of votes requires that the information contained in a vote is counted, i.e. it is tabulated, it is added up. A cache, as taught by Oracle 8i, is a buffer, a temporary storage where information can be collected prior to being written into the database. The Oracle 8i software that uses a cache provides for the programmer specifying the duration with which the software stores information (i.e. including vote data). Since the software requires this as a programming step in setting up the software (that is, setting up the cache to operate), the duration is predefined by the programmer.

Using a cache, as taught by Oracle 8i, accumulates data (i.e. votes) in the memory prior to writing the votes that are accumulated into the database. When data (i.e. votes) are accumulated in a buffer they form an intermediate result because not all the data (i.e. votes) that are received are accumulated at one time in the cache – the cache is, according to point of having a cache or buffer.

Furthermore the motivation to incorporate this feature into Bayer to render this

feature of the claimed invention obvious is provided by Oracle 8i. Oracle 8i teaches that using a cache to store data prior to writing it into a database improves the performance of the access to the database, i.e. provides high-performance access to the database. Thus, there is motivation to modify Bayer to incorporate Oracle 8i's teachings regarding using a cache to write to a database, because it would improve the access to the database, i.e. make it high-performance.

(Examiner comment, the concept of using a buffer to store information is an extremely old concept. The concept of a buffer goes back to at least the use of hydraulic accumulators to smooth out pressure/flow fluctuations in hydraulic lines. The use of a cache, i.e. which is a buffer in memory, to accumulate information prior to writing into a database is similarly old and well known in the art).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 USC. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. **Claims 1-7, 9, 11-15 and 18-32** are rejected under 35 USC. 103(a) as being unpatentable over **Bayer** US Patent 6,311,190 in view of **Oracle 8i** and further in view of **Blumberg** US 6,240,415.

Oracle 8i is described in the following two references:

"Programmatic Environments for Oracle Objects", Oracle 8i Application Developer's Guide –Fundamentals, copyright 1999, Oracle Corporation, pp.1-18, hereafter referred to as **Reference A**.

"Programmatic Environments", Oracle 8i Application Developer's Guide – Fundamentals, copyright 1999, Oracle Corporation, pp.1-27, hereafter referred to as **Reference B**.

Regarding **Claims 1 & 2**, Bayer teaches:

receiving votes at the server in response to the survey question (Figure 13 #98, votes received; column 2 line 39, server provides an addressable voting site); and

tabulating in memory the stored votes accumulated over a predefined time

interval to generate intermediate voting results. (column 17 line 63-65, survey durations are predefined and are used to determine the generating of intermediate voting results-see also column 18 line 35-38). Bayer teaches that each vote is individually written to the database, so there is a record of each person voting.

writing the intermediate voting results to the database (Column 3 line 7—line 12, when a person votes, the network server receives the answers and adds those answers representing votes to records in the database (memory) tallying totals for each response answered. Since the server performs these tasks every time a person votes, it generates an intermediate voting result and writes it to the database.)

computing <u>in real time</u> a final voting result to the survey question by <u>continuously</u> tallying each of the intermediate voting results written in the database (Figure 13 #98, votes received and results page constructed of final voting result to the survey question). Bayer teaches that at the end of campaigns, the intermediate results from various surveys are computed based on the intermediate voting results (see column 18 line 17-21, surveys, i.e. intermediate voting results, are tallied at the end of a campaign to compute a final voting result to the survey question).

Column 1 line 19-24, viewers can immediately view their results (i.e. in real time) after voting.

Column 7 line 25-30, the Tally table continuously updates vote totals received from voters.

Bayer does not teach high density voting over a computer network using an

object residing on a server that maintains persistent connections between the object and a database; caching the votes received in a memory cache using the object; using the cached votes in calculating a result.

However, the concept of using objects in a memory cache to provide a buffer to enable high performance access to a database is a well-known concept, as evidenced by Oracle 8i.

Specifically, Oracle 8i teaches the use of objects to:

providing an object on the server that maintains connections with the database.

Reference B page 2 paragraph 5 line 3-4, objects maintain connections between the copy in the cache and the corresponding database object--this database object is in memory on the server.

Caching the votes received in a memory cache for a predefined time interval using the live event object.

Reference A, page 2 paragraph 3 line 1, a client side object cache for caching objects in memory;

Reference A page 5 paragraph 2 line 1, when pinning an object, the duration an object is pinned in memory, that is to have computations performed on the object, can be specified the programmer. That is, the programmer can predefine the intervals in which votes are tabulated in memory.

tabulating in memory cached votes accumulated over the predefined time interval to generate intermediate voting results;

Reference A page 2 paragraph 2 line 5, computations can be performed on each object, including but not limited to a plurality of arithmetic operations of data, including tabulation of data (i.e. votes);

Reference A page 4 paragraph 2 line 1-2, objects in memory are pinned for the application to manipulate, including performing the computations mentioned above, and;

Reference A page 5 paragraph 2 line 1, when pinning an object, the duration an object is pinned in memory, that is to have computations performed on the object, can be specified the programmer. That is, the programmer can predefine the intervals in which votes are tabulated in memory.

Reference A page 8 paragraph 2 line 1-4, before an object, including those which tabulate votes, can be updated, it must be pinned in the cache, then, objects which are marked as updated are flushed to the server when the transaction is committed.

Writing results, including intermediate results accumulated in memory (i.e. a cache buffer) and each raw vote accumulated over the predefined time interval, to the database at the predefined time interval.

Reference A page 2 paragraph 3 line 7, objects in the cache, including those which contain intermediate results as a result of calculations (see Reference A page 2 paragraph 2 line 5 as per above), can be written (i.e. flushed) to the database. This means that any calculation including counting (i.e. tabulating of vote results), can be tallied to the database when the predefined interval for updating the cache occurs – see

Reference A page 5 paragraph 2 line 1 for a discussion about setting a predefined time interval for pinning objects in the cache.

Accordingly, a programmer using Oracle 8i can create an object cached in memory to tabulate data (i.e.votes) (objects in cached memory can have computations performed on them, as discussed above), specify intervals that the object will tabulate votes, and at the end of that interval, update the database using a transaction from that object.

Furthermore, Oracle 8i teaches that the use of cached objects provides high performance access to a database (Reference A Page 2 paragraph 4 line 1-2).

Both Bayer and Oracle 8i address utilizing computers to handle manipulating and storing information on databases, and thus both are analogous art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Bayer, as discussed above, with providing an object residing in memory on the server to cache votes and tabulate them in memory to generate intermediate voting results at specified intervals, as taught by Oracle 8i, because it would provide a high performance way to tabulate votes and write voting results to a database.

Bayer and Oracle 8i do not teach persistent connections used to connect an object application to a database.

The examiner takes Official Notice that persistent connections used in object-oriented programming to connect an object application to a database are well known in the art and are providing by most object programming languages, including Java and C++. Persistent connections enable an object-oriented application to always have a connection to a database.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Bayer and Oracle 8i, with maintaining persistent connections between the object and the database, for the purpose of enabling high density interactive voting over a network that maintains persistent connections to a voting database.

Bayer and Oracle 8i do not teach:

presenting a survey question and a plurality of responses to voters viewing the live television broadcast event;

directing the voters to cast votes over the Internet at a web site of a sponsor of the live television broadcast event;

presenting the final voting results to viewers on the live television broadcast event prior to its conclusion.

Blumberg teaches:

presenting a survey question and a plurality of responses to voters viewing the live television broadcast event;

column 5 line 48-52, 58, remote viewers can input their responses over the internet while viewing a program on the television.

directing the voters to cast votes over the Internet at a web site of a sponsor of the live television broadcast event;

column 8 line 21-23, the users can interact with the website – see also column 10 line 30-32, users can cast votes on which play should be made during sports television broadcast – see also column 10 line 62-65.

presenting the final voting results to viewers on the live television broadcast event prior to its conclusion.

Column 11 line 15-20, viewers of a sports game can vote on which play the team should run (e.g. during a huddle). The results of their voting is displayed in the subsequent play.

Blumberg teaches that his invention provides a way for viewers of a live television event to participate in the event (column 3 line 20-25). Blumberg teaches that his invention provides for viewers of a live television event to be more intimately involved in the ongoing decisions during a game (column 11 line 29-31).

Blumberg addresses involving viewers in a live television broadcast event through the use of voting over the internet. Blumberg utilizes a database along with a webpage to interface with the live event viewers (column 9 line 45-50).

Bayer's invention addresses providing detailed surveys through the use of the internet and a database to provide for detailed polling of users interested in participating in surveys.

Oracle 8i addresses what is known in the art regarding the operation and function of databases.

Because Blumberg, Bayer and Oracle 8i address the utilization of databases, they are all analogous art.

Bayer teaches that an automated system for creating and administering surveys over the internet allows for users to vote and to see their results immediately, i.e. in real time.

Oracle 8i teaches using objects in connection with a database (including using a buffer) to support writing to a database. Oracle 8i teaches what is well known in the art regarding the use of a cache (i.e. a buffer) to provide for temporarily storing data (i.e. votes, since an electronic vote is nothing more than data).

As noted above, Blumberg teaches that receiving information into a database that can be used to provide direct feedback during a live television event engages the viewers by directly involving them in a decision making process during the event.

One of ordinary skill in the art at the time of the invention would modify the combined teachings of Bayer and Oracle 8i regarding providing for surveys and voting using a database and a cache, to include the step of providing feedback results during a live broadcast television event, as taught by Blumberg, because it would engage the viewers of the television event by involving them in the decision-making process of the live television event.

Regarding **Claim 3**, Bayer does not teach: **the object being resident in computer memory on the server**.

Oracle 81 teaches: **the object being resident in computer memory on the server** (Reference B page 2 paragraph 5 line 3-4, objects maintain connections between the copy in the cache and the corresponding database object--this database object is in memory on the server.).

Oracle 8i teaches that the use of cached objects provides high performance access (Reference A Page 2 paragraph 4 line 1-2).

Both Bayer and Oracle 8i address utilizing computers to handle manipulating and storing information on databases, and thus both are analogous art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Bayer, as discussed above, with providing an object

residing in memory on the server, as taught by Oracle 8i, because it would provide a high performance way to connect to a database.

Regarding **Claim 4**, Bayer does not teach: **having the object establish and maintain at least three persistent connections**.

The examiner takes Official Notice that it is established and well known in the art to program persistent connections in object-oriented applications, whether there be three or more persistent connections, depending on the requirements of the particular application. Programming languages such as Java and C++ have provisions for establishing and maintaining persistent connections in the course of creating object-oriented applications. These connections ensure that an application has a continuous link to either a database or other related applications to ensure accessibility during the course of program execution.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the limitations of Claim 1, as taught by Bayer and Oracle 8i, with having the object establish and maintain at least three persistent connections with the database, for the purpose of ensuring continuous accessibility to the database during the course of program execution.

Regarding **Claim 5**, Bayer teaches **raw votes** (Figure 3L, answerID field) **cast**

by each of the voters (column 9 line 46, each response from a voter is put in table).

Regarding **Claim 6**, Bayer does not teach: **the persistent connections including current voting results obtained using the cached votes**.

Oracle 8i teaches: **obtaining results using information, including votes, that are in an object cache** (Reference A page 2 paragraph 2 line 5, computations can be performed on each object, including but not limited to a plurality of arithmetic operations of data, including tabulation of data (i.e. votes);

Furthermore, Oracle 8i teaches that the use of cached objects provides high performance access (Reference A Page 2 paragraph 4 line 1-2).

Both Bayer and Oracle 8i address utilizing computers to handle manipulating and storing information on databases, and thus both are analogous art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Bayer, as discussed above, with tabulating votes in cached memory to obtain current voting results, as taught by Oracle 8i, because it would provide a high performance way to tabulate votes

Bayer and Oracle 8i do not teach persistent connections.

The examiner takes Official Notice that persistent connections used in object-oriented programming to connect an object application to a database are well known in the art and are providing by most object programming languages, including Java and C++. Persistent connections enable an object-oriented application to always have a connection to a database.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the limitations of Claim 4, as taught by Bayer and Oracle 8i, with using persistent connections to the database, for the purpose of improving performance by performing data tabulation using an object cache with persistent connections to the database.

Regarding **Claim 7**, Bayer teaches: **voting in response to the survey questions asked during an event** (column 6 line 50-51, surveys are programmed to start in advance of certain days-voting is in response to the questions posed during a survey), **including a definition of the event** (column 6 line 33-34, voting campaign is comprised of one or more surveys; column 6 line 55, survey start dates set in advance).

Regarding **Claim 9**, Bayer teaches: **tabulating the intermediate voting results to compute final voting results** (column 17 line 18-20, for each set of responses, percentages and histogram are calculated to compute final voting results from

intermediate results).

Regarding **Claim 10**, Bayer teaches: **tabulating the intermediate voting results continuously to compute final voting results in real time** (Figure 13 #98, receive votes; Figure 14 #124, votes added to totals, column 2 line 19-20, in real time since voters can see results when they vote).

Regarding **Claim 11**, Bayer teaches: **creating the survey question** (column 2 line 60-61, question created based on campaign).

Regarding **Claim 12**, Bayer teaches: **defining an event in which the survey question is asked** (column 6 line 50-51, start date set for survey (i.e. event) in advance; column 6 line 53-54, surveys are set in queue order prior to offering to customers), **and checking a validity of the survey question and the event definition to ensure accuracy** (Figure 7 – add or modify campaign, Figure 8 – add or modify survey question, Figure 9 – add or modify survey).

Bayer teaches that the administrator can check to see if particular questions exist for a survey (column 13 line 21) and can review or modify the question if needed (column 13 line 37, review or modify page for changing question).

Regarding **Claim 13**, Bayer teaches: **determining whether there has been a**

new survey question created and, if so, then updating the database (column 13 line 21-23, administrator checks if question exists; column 13 line 29, QuestionType table in database is updated by administrator).

Regarding **Claim 14**, all the limitations are addressed in Claim 1 above, except for: **wherein the object is a non-relational object**.

Bayer does not teach **wherein the object is a non-relational object**.

Oracle teaches **wherein the object is a non-relational object**.

Reference A page 1 paragraph 1 line 3-4, the objects in Oracle 8i are language based, e.g. based on Java, C++ etc.

Furthermore, Oracle 8i teaches that the use of cached, non-relational objects provides high performance access to a database (Reference A Page 2 paragraph 4 line 1-2).

Both Bayer and Oracle 8i address utilizing computers to handle manipulating and storing information on databases, and thus both are analogous art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Bayer, as discussed above, with providing an object residing in memory on the server to cache votes and tabulate them in memory to generate intermediate voting results at specified intervals, as taught by Oracle 8i,

because it would provide a high performance way to tabulate votes and write voting results to a database.

Regarding **Claim 15**, Bayer does not teach: **the object contains some of the voting data as well as procedures and instructions for manipulating at least some of the data**.

Oracle 8i teaches: **that the object contains some of the voting data** (Reference A page 2 paragraph 3 line 6, objects can be updated, i.e they contain data, including voting data) **and that the object contains procedures and instructions for manipulating data** (reference A page 2 paragraph 3 lines 2-7, Oracle 8i provides support for navigational access of objects, including containing procedures and instructions for creating, updating and deleting objects in the cache, i.e. data).

Oracle 8i teaches that the use of cached, non-relational objects provides high performance access (Reference A Page 2 paragraph 4 line 1-2).

Both Bayer and Oracle 8i address utilizing computers to handle manipulating and storing information on databases, and thus both are analogous art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Bayer, as discussed above, with the object contains some of the voting data as well as procedures and instructions for manipulating at least

some of the data, as taught by Oracle 8i, because it would provide a high performance way to tabulate votes and write voting results to a database.

Regarding **Claim 16**, Bayer teaches: **tabulating the final voting result using the intermediate voting result** (Figure 13 #98, receive votes; Figure 14 #124, votes added to totals, column 17 line 18-21, results calculated for each voter from intermediate results).

Regarding **Claim 17**, Bayer teaches: **tabulating the final voting result in real time** (Figure 13 #98, receive votes; Figure 14 #124, votes added to totals, column 17 line 18-21, results calculated for each voter from intermediate results in real time).

Regarding **Claims 18 and 19**, Bayer does not teach **one**, per Claim 18, or **three**, per Claim 19, **persistent connection(s) between the object and database that is maintained by the object**.

The examiner takes Official Notice that it is established and well known in the art to program persistent connections in object-oriented applications, whether there be three or more persistent connections, depending on the requirements of the particular application. Programming languages such as Java and C++ have provisions for establishing and maintaining persistent connections in the course of creating object-oriented applications. These connections ensure that an application has a continuous

link to either a database or other related applications to ensure accessibility to the application or database during the course of program execution.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the limitations of Claim 14, as taught by Bayer and LOC, with having the object establish and maintain at least three persistent connections, for the purpose of ensuring continuous accessibility to the database during the course of program execution.

Regarding **Claim 20**, Bayer teaches: **an authoring system that enables a user to define an event** (column 6 line 50-51, start date set for survey as part of campaign in advance; column 6 line 53-54, surveys are set in queue order prior to offering to customers) **and create polling questions associated with the event** (Figure 4 #52, add/modify campaign; Figure 4 #56, add/modify question) **for distribution to the voters** (Figure 2A, sample webpage).

Regarding **Claim 21**, Bayer teaches: **a staging component that copies the event definition and polling questions to the database** (column 3 line 2-3, elements of survey webpages, including questions, are stored in a database; Figure 16A, campaign database table structure that defines campaigns and associated surveys; column 3 line 3-5, administrator can modify/create campaign information, see also Figure 4 #52).

Regarding **Claim 22**, all the limitations are addressed in Claim 1 above, except for: **the intermediate voting results are used to compute the final voting results in real time.**

Bayer teaches:

the intermediate voting results are used to compute the final voting results in real time.

Column 17 line 62-column 18 line 2, a voter can select to view the final voting results of any previous voting campaign. This is done by specifying a date range. Once the voter enters their selection, the result is returned in real time over the on-line networked interface taught by Bayer.

Regarding **Claim 23**, Bayer does not teach: **a vote cache that receives and caches at least some of the voting data from the object**.

Oracle 8i teaches: **a vote cache that receives and caches at least some of the voting data from the object** (reference A page 2 paragraph 3 line 6, objects in cache can be updated, including for receiving data (i.e. votes) –the cache the objects are in provides memory for storing the vote data. The objects in cache memory that Oracle 8i teaches contain memory for receiving and storing data as well as instructions for manipulating that data.)

Oracle 8i teaches that the use of cached, non-relational objects provides high

performance access (Reference A Page 2 paragraph 4 line 1-2).

Both Bayer and Oracle 8i address utilizing computers to handle manipulating and storing information on databases, and thus both are analogous art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Bayer, as discussed above, with a vote cache that receives and caches at least some of the voting data from the object, as taught by Oracle 8i, because it would provide a high performance way to tabulate votes and write voting results to a database.

Regarding **Claim 24**, Bayer does not teach: **a processor that tabulates the cached voting data from the vote cache to generate intermediate voting results**.

Oracle 8i teaches: **a processor that tabulates the cached voting data from the vote cache to generate intermediate voting results** (Reference A page 1 paragraph 2 line 1-2, Oracle runs on a server that inherently contains a processor for tabulating and operating on the objects in the cache, including data for voting – see page 2 paragraph 3 line 6).

Oracle 8i teaches that the use of cached, non-relational objects provides high performance access (Reference A Page 2 paragraph 4 line 1-2).

Both Bayer and Oracle 8i address utilizing computers to handle manipulating and storing information on databases, and thus both are analogous art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Bayer, as discussed above, with a processor that tabulates the cached voting data from the vote cache to generate intermediate voting results, as taught by Oracle 8i, because it would provide a high performance way to tabulate votes and write voting results to a database.

Regarding **Claim 25**, Bayer teaches: **tabulating the intermediate voting results continuously to compute final voting results in real time** (Figure 13 #98, receive votes; Figure 14 #124, votes added to totals, column 2 line 19-20, in real time since votes can see results when they vote).

Claims 26 and 27 recite limitations similar to those cited in the rejection of **Claims 1, 14 and 15** above, and are therefore rejected under the same rationale.

Claim 28 recites limitations similar to those cited in the rejection of **Claim 23** above, and is therefore rejected under the same rationale.

Regarding **Claim 29**, Bayer teaches:

writing each of the received votes to the database to allow cross-tabulation of demographic data.

Figure 14 #126, a country summary is build to allow cross-tabulation of data from different countries (i.e. demographic data).

Regarding **Claim 30**, Bayer does not teach:

wherein the predefined time interval is approximately fifteen seconds.

Oracle 8i teaches:

wherein the predefined time interval is approximately fifteen seconds.

Reference A page 5 paragraph 2 line 1, time durations for pinning objects in memory can be specified in a predetermined way, including for fifteen seconds. The choice of 15 seconds is a design choice and is anticipated by the functionality provided by Oracle 8i.

Oracle 8i teaches that the use of cached, non-relational objects provides high performance access (Reference A Page 2 paragraph 4 line 1-2).

Both Bayer and Oracle 8i address utilizing computers to handle manipulating and storing information on databases, and thus both are analogous art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Bayer, as discussed above, with wherein the

predefined time interval is approximately fifteen seconds, as taught by Oracle 8i, because it would provide a high performance way to tabulate votes and write voting results to a database.

Regarding **Claim 31**, Bayer teaches:

tabulating in memory a plurality of the intermediate voting results written to the database such that the final voting results are updated;

column 30 line 57-60, voting data is stored in memory as voters cast votes, i.e. the system tabulates in memory a plurality of the intermediate voting results such that the final voting results are updated.

and writing the updated final voting results to the database.

column 30 line 64-67, the final voting results are added (i.e. written) to the database.

Regarding **Claim 32**, Bayer does not teach:

further comprising updating the final voting results approximately every ten seconds.

Oracle teaches:

further comprising updating the final voting results approximately every ten seconds.

Reference A page 5 paragraph 2 line 1, time durations for pinning objects in memory can be specified in a predetermined way, including for ten seconds. The

choice of 10 seconds is a design choice and is anticipated by the functionality provided by Oracle 8i.

Oracle 8i teaches that the use of cached, non-relational objects provides high performance access (Reference A Page 2 paragraph 4 line 1-2).

Both Bayer and Oracle 8i address utilizing computers to handle manipulating and storing information on databases, and thus both are analogous art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Bayer, as discussed above, with wherein the predefined time interval for updating the final voting results is approximately ten seconds, as taught by Oracle 8i, because it would provide a high performance way to tabulate votes and write voting results to a database.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6,439,997 by Brasseur discloses a television/internet game show

US 2002/046273 by Lahr discloses a method for real time data mining of video servers.

US 6,567,012 by Lydon discloses a system and method for coding competitions.

US 6,088,722 by Herz discloses a method for providing content based on feedback from users.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan G. Sterrett whose telephone number is (571) 272-6881. The examiner can normally be reached on Monday-Friday, 8:00AM - 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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JGS
4/10/2006

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